

LIS REPLACEMENT PROJECT

LABORATORY INFORMATION SYSTEM



Lipid Testing and Reporting Update

What is PathWest doing?

PathWest is implementing a new Laboratory Information System (LIS). This has provided the opportunity to update and harmonise the lipid report format across all PathWest laboratory sites.

PathWest now reports non HDL cholesterol as part of a full lipid profile

- Non HDL cholesterol, as the name implies, simply subtracts HDL cholesterol from total cholesterol.
- Non HDL cholesterol is a measure of the cholesterol content in all the atherogenic lipoproteins, namely VLDL, IDL, LDL, remnants and Lp(a).
- Non HDL cholesterol is a more accurate measure than LDL cholesterol in individuals with high triglyceride, non-fasting samples, and in those with very-low LDL cholesterol.

PathWest no longer reports total cholesterol to HDL cholesterol ratio

- Total cholesterol to HDL cholesterol ratio should not be interpreted in isolation. Instead, absolute cardiovascular risk should be calculated.
- Lipid reports contain information directing clinicians to an appropriate online calculator (cvdcheck.org.au/). This calculation requires total cholesterol and HDL cholesterol together with information of the patient's age, gender, smoking status, systolic blood pressure and whether the patient is known to have diabetes or left ventricular hypertrophy.

How to order?

- Request "Lipids and HDL" to receive a full lipid report containing total cholesterol, HDL cholesterol, LDL cholesterol, non HDL cholesterol and triglyceride
- If only "Lipids" are requested Medicare will not allow the laboratory to charge for HDL cholesterol and it will not be reported. In compliance with Medicare, only total cholesterol and triglycerides will be reported.

Where can I find out more?

Please see an example of the new lipid report on the next page.

For further information please contact [Dr Melissa Gillett](#) (phone 6152 3674) or [Dr Ee Mun Lim](#) (phone 6383 4104).

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Example of new lipid report:

Fasting Status	Fasting		
Total Cholesterol	3.9	<=5.5	mmol/L
Triglyceride	1.1	<=2.0	mmol/L
HDL cholesterol	1.3	>=1.0	mmol/L
LDL cholesterol	2.1	<=3.0	mmol/L
Non HDL cholesterol	2.6	<=4.0	mmol/L
Comment	See below		

Pharmacotherapy for lipid lowering should aim towards the following targets while balancing the risks/benefits:

Total cholesterol	<4.0	mmol/L
Triglyceride	<2.0	mmol/L
HDL cholesterol	>=1.0	mmol/L
LDL cholesterol	<2.0	mmol/L
Non HDL cholesterol	<2.5	mmol/L

[National Vascular Disease Prevention Alliance. Guidelines for the management of absolute cardiovascular disease risk. 2012]

Absolute cardiovascular risk assessment should be performed on all adults aged between 45-75 years without existing CVD or not already known to be at increased risk of CVD.
(A CVD risk calculator is provided at www.cvdcheck.org.au/)